

Rectangle:  $= bh$   
 Parallelogram:  $= bh$   
 Square  $= s^2$   
 Triangle:  $= (1/2) bh$   
 Trapezoid:  $= \frac{1}{2} h(b_1 + b_2)$   
 Rhombus:  $= \frac{1}{2} d_1 \cdot d_2$   
 Kite:  $= \frac{1}{2} d_1 \cdot d_2$   
 Circle:  $= \pi r^2$   
 Reg. Polygon:  $= \frac{1}{2} ap$   
 Sector:  $= (N/360) \pi r^2$

Name \_\_\_\_\_

Date \_\_\_\_\_

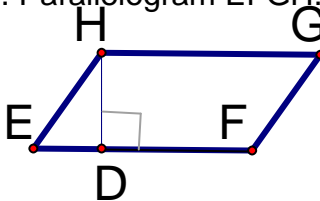
### Area Review worksheet 201

Figures may not be drawn to scale. Do not forget to include units.

1. If the area of rectangle ABCD =  $450\text{cm}^2$ , and  $AD = 12.5\text{cm}$ , find DC.

2. In rectangle ABCD,  $BC = 8\text{mm}$ ,  $BD = 16\text{mm}$ . Find the area.

3. Parallelogram EFGH,  $EF = 25\text{cm}$ , Area =  $250\text{cm}^2$ , find HD.



4. Equilateral triangle ABC.  $AC = 2\text{cm}$ . Find the area.

Use the rhombus to the right for #s 5 -9

5.  $m\angle EPA =$  \_\_\_\_\_

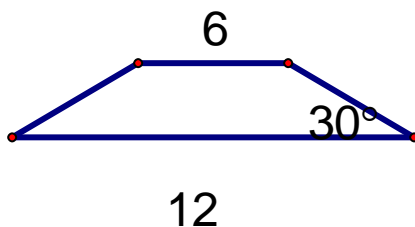
6.  $NA = 16$ ;  $RE = 20$ ; Area = \_\_\_\_\_

7.  $NA = 20$ ; Area =  $180$ ;  $RE =$  \_\_\_\_\_

8.  $NA = 5$ ;  $RP = 6$ ; Area = \_\_\_\_\_

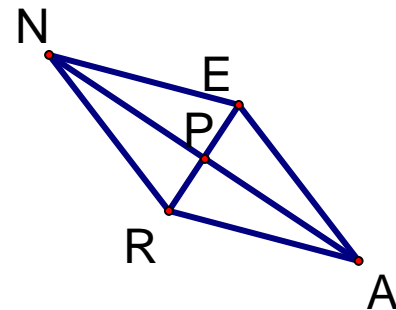
9.  $NE = 10$ ;  $RE = 16$ ;  $NP =$  \_\_\_\_\_; Area = \_\_\_\_\_

10. Given the isosceles trapezoid. Area = \_\_\_\_\_



11. Equilateral triangle with a radius of 12. Area = \_\_\_\_\_

12. Equilateral triangle with one side of 24. Area = \_\_\_\_\_



13. The diagonal of a square is  $18\sqrt{2}$ .

One side = \_\_\_\_\_

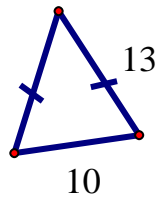
Apothem = \_\_\_\_\_

Perimeter = \_\_\_\_\_

Area = \_\_\_\_\_

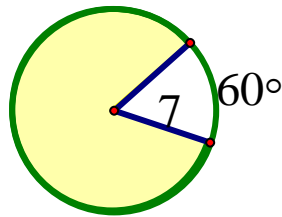
14. The perimeter of a regular hexagon is  $12\sqrt{3}$ . Find the area.

15. Find the area of the triangle.

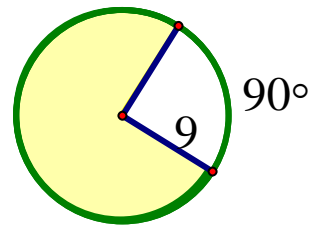


For #s16-20, find the **probability** that a point chosen at random would lie in the shaded region.

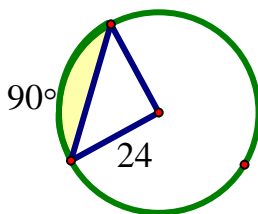
16. \_\_\_\_\_



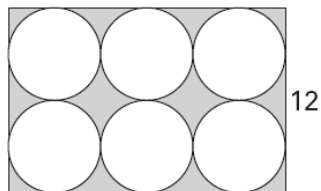
17. \_\_\_\_\_



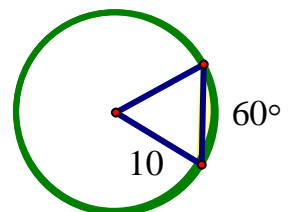
18. \_\_\_\_\_



19. \_\_\_\_\_

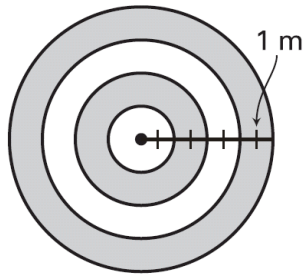


20. \_\_\_\_\_

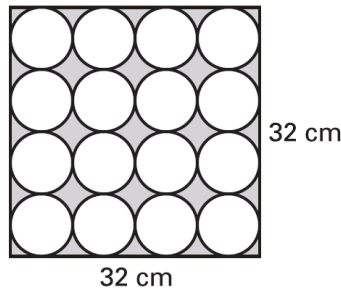


Find the area of the shaded region.

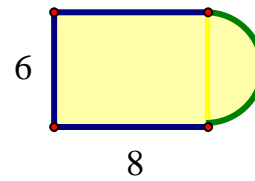
21. \_\_\_\_\_



22. \_\_\_\_\_

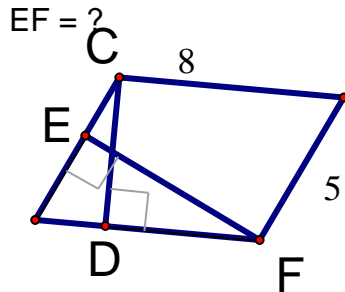


23. \_\_\_\_\_



Find the **area**, and then find the **indicated length**.

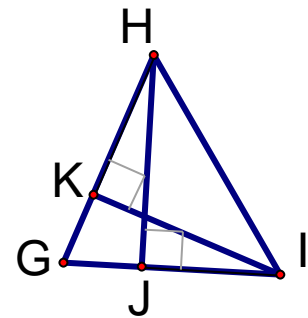
24. \_\_\_\_\_



CD = 4

25. \_\_\_\_\_

GI = 12  
HJ = 7  
HG = 10  
KI = ?



Find the area of the given regular polygon.

26. \_\_\_\_\_

Octagon  
P = 96cm

27. \_\_\_\_\_

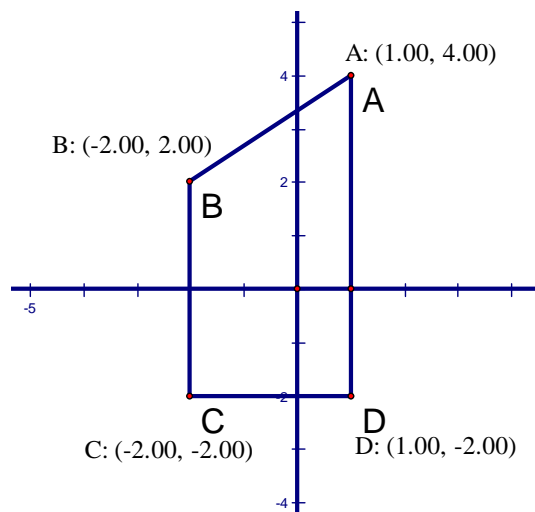
Pentagon  
side = 12

28. \_\_\_\_\_

Square  
r = 6

Find the area of the figure.

29. \_\_\_\_\_



30.  $m\angle CBA = 45^\circ$

$\overline{AE}$  and  $\overline{CD}$  are altitudes.

$AC = 13$

$AD = 5$

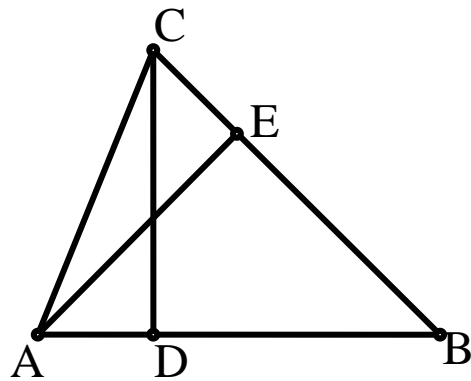
Find  $CD$ . \_\_\_\_\_

Find  $BD$ . \_\_\_\_\_

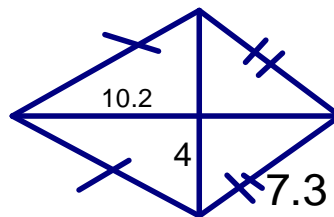
Find Area. \_\_\_\_\_

Find  $BC$ . \_\_\_\_\_

Find  $AE$ . \_\_\_\_\_



31. \_\_\_\_\_ Find the area of the kite.



32. \_\_\_\_\_ Find the area of a hexagon;  $r = 7\text{cm}$

33.  $b =$  \_\_\_\_\_

Rectangle

$A = 480\text{cm}$

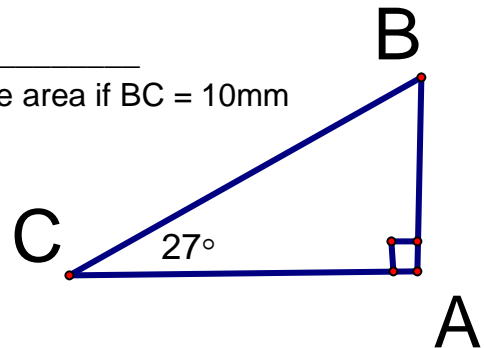
$h = 30\text{ cm}$

$b = ?$

diagonal = ?

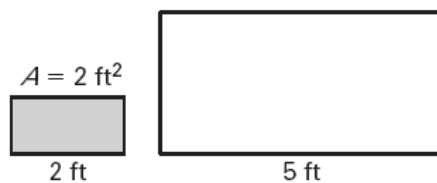
34.  $A =$  \_\_\_\_\_

Find the area if  $BC = 10\text{mm}$



Corresponding lengths in similar figures are given. Find the ratios (shaded to unshaded) of the perimeters and areas. Find the unknown area.

35



36.

